

REMARKS

Claims 1-3 and 9-16 are pending in the Application. Claims 4-8 are cancelled. Claims 1-3 and 9-16 are rejected under 35 U.S.C. § 112, second paragraph. Claims 1-3 and 9-16 are rejected under 35 U.S.C. § 103(a). Applicants respectfully traverse these rejections for at least the reasons stated below and respectfully request the Examiner to reconsider and withdraw these rejections.

I. REJECTIONS UNDER 35 U.S.C. § 112:

The Examiner has rejected claims 1-3 and 9-16 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Paper No. 3, page 3. The Examiner states that the terms "activity" or "activities" are indefinite. Paper No. 3, page 3. Applicants respectfully traverse the assertion that the terms "activity" or "activities" are indefinite, and direct the Examiner's attention to page 9, lines 1-2 and page 10, line 15 of the Specification for a noted meaning of the terms "activity" and "activities." Applicants assert that configuration methods are but one example of the claimed "activity" and that any action where information is processed is an "activity" in a processor. Hence, Applicants respectfully assert that one having ordinary skill in the art would understand the meaning of the terms "activity" or "activities." The rejection under 35 U.S.C. § 112, second paragraph, is not appropriate if the scope of the claimed subject matter can be determined by one having ordinary skill in the art. M.P.E.P. § 706.03(d).

II. REJECTIONS UNDER 35 U.S.C. § 103:

The Examiner has rejected claims 1-2, 9-10, 12-14 and 16 under 35 U.S.C. § 103(a) as being unpatentable over *Mann* (U.S. Patent No. 6,295,534) in view of *Rathbun* (U.S. Patent No. 6,138,123). The Examiner further rejects claims 3, 11 and 15 under 35 U.S.C. § 103(a) as being unpatentable over *Mann* in view of *Rathbun* in further view of *Dinwiddie et al.* (U.S. Patent No. 5,113,522) (hereinafter "*Dinwiddie*"). Applicants respectfully traverse these rejections for at least the reasons

provided below and respectfully request that the Examiner reconsider and withdraw these rejections.

A. ***The Examiner has not provided any motivation for combining Mann with Rathbun***

A *prima facie* showing of obviousness requires the Examiner to establish, *inter alia*, that the prior art references teach or suggest, either alone or in combination, all of the limitations of the claimed invention, and the Examiner must provide a motivation or suggestion to combine or modify the prior art reference to make the claimed inventions. M.P.E.P. §2142. The motivation or suggestion to combine references must come from one of three possible sources: the nature of the problem to be solved, the teaching of the prior art and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d. 1453,1458 (Fed. Cir. 1998). The showings must be clear and particular. *In re Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433-34 (Fed. Cir. 2002); *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000); *In re Dembiczak*, 50 U.S.P.Q.2d. 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence. *Id.*

In order to reject under 35 U.S.C. § 103, therefore, the Examiner must provide a proper motivation for combining or modifying the references. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457-1458 (Fed. Cir. 1998); M.P.E.P. § 2142. The Examiner's motivation for modifying *Mann* to track activities running in parallel is in order to "increase the speed and power of the system for maintenance of the ordered list of data." Paper No. 3, pages 4-5. This motivation is insufficient to support a *prima facie* case of obviousness, since it is merely the Examiner's subjective opinion.

Thus, there is no proper motivation to combine *Mann* with *Rathbun* as there is no suggestion or motivation supported by objective evidence in either *Mann* or *Rathbun*, or in their combination, or in the knowledge of those ordinarily skilled in the art, to combine the teaching of an apparatus for storing and modifying an ordered list suitable for use in data communications and other equipment, as taught in *Mann*,

with the teaching of creating parallel data structures and associated maintenance programs, as taught in *Rathbun*.

Mann teaches:

An apparatus for *maintaining an ordered list which can store any type and number of data items*. The ordered list can be implemented in hardware so as to enable fast, efficient maintenance of an ordered list of data. The data to be stored in the list is stored as a plurality of data cells each comprising any number of bits. The ordered list permits data to be read from, written to and deleted from the list. *Data is written to the list using a push operation and data is deleted from the listing using a pop operation*. A controller, processor or other source, provides the cell address information for each read, push and pop operation. *The ordered list comprises a plurality of index units with each index unit comprising a 3 to 1 multiplexor whose output is connected to a data cell comprising a register or suitable data storage device*. The mux selects data to its output from either (1) input cell data (2) the data cell in the previous index unit or (3) the data cell in the next index unit. Individual operations of pushing, popping and reading are defined. In addition, a push operation and a pop operation can be performed simultaneously regardless of whether the push address is greater than, smaller than or equal to the pop address. Abstract.

Thus, *Mann* teaches an ordered list which can store any type of number of data items. *Mann* further teaches that the data to be stored in the ordered list is stored as a plurality of data cells, each comprising any number of bits.

Rathbun teaches:

Parallel data-structures distribute a given data set to system components by grouping the data set according to ranges. These ranges are sub-divided for distribution into parallel form. A given data value is located by its placement within an appropriate range; the ranges are located by their relationships to each other and the data set as a whole; thus, the ranges are related to each other, the order of the data set is maintained and access is gained to the data set by range. Each range may be distributed to multiple nodes; each node may be contained in a separate data-structure; each separate data-structure may be maintained on a separate system component. The result is a method of *creating and using parallel data-structures that may take a wide variety of forms and be used to control data distribution and the efficient distribution of system resources*. Abstract.

Thus, *Rathbun* teaches creating parallel data structures and associated maintenance programs.

The Examiner has not shown why a reference that teaches storing and modifying an ordered list suitable for use in data communications and other equipment, as taught in *Mann*, should be combined with the reference that teaches creating parallel data structures and associated maintenance programs, as taught in *Rathbun*, from either the nature of the problem to be solved, the teachings of the prior art, or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998).

The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of combining the reference that teaches storing and modifying an ordered list suitable for use in data communications and other equipment with a reference that teaches creating parallel data structures and associated maintenance programs. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 1-2, 9-10, 12-14 and 16.

As stated above, the Examiner's motivation for modifying *Mann* to track activities running in parallel is to increase the speed and power of the system for maintenance of the ordered list of data. The Examiner has not shown why *Mann* should be modified to track activities running in parallel from either the nature of the problem to be solved, the teachings of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Further, the Examiner has not shown why *Mann* should be modified to increase the speed and power of the system for maintenance of the ordered list of data from either the nature of the problem to be solved, the teachings of the prior art or in the knowledge of persons of ordinary skill in the art. *Id.*

The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Mann* to track activities running in parallel. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion

in support of modifying *Mann* to increase the speed and power of the system for maintenance of the ordered lists of data. *Id.* Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 1-2, 9-10, 12-14 and 16.

Furthermore, if the proposed modification or combination of the prior art would *change the principle of the operation of the prior art invention being modified*, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349, (C.C.P.A. 1959). Further, if the proposed modification would *render the prior art invention being modified unsatisfactory for its intended purpose*, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). *Mann* teaches:

An apparatus for *maintaining an ordered list which can store any type and number of data items. The ordered list can be implemented in hardware so as to enable fast, efficient maintenance of an ordered list of data.* The data to be stored in the list is stored as a plurality of data cells each comprising any number of bits. The ordered list permits data to be read from, written to and deleted from the list. Data is written to the list using a push operation and data is deleted from the listing using a pop operation. A *controller, processor or other source, provides the cell address information for each read, push and pop operation. The ordered list comprises a plurality of index units with each index unit comprising a 3 to 1 multiplexor whose output is connected to a data cell comprising a register or suitable data storage device.* The mux selects data to its output from either (1) input cell data (2) the data cell in the previous index unit or (3) the data cell in the next index unit. Individual operations of pushing, popping and reading are defined. In addition, a push operation and a pop operation can be performed simultaneously regardless of whether the push address is greater than, smaller than or equal to the pop address. Abstract.

A block diagram illustrating an ordered list constructed in accordance with a first embodiment of the present invention is shown in FIG. 4. *The ordered list, generally referenced 40, comprises a plurality of index units 44 stacked one on top another in linear (i.e. sequential) fashion and control circuitry 42.* Each index unit 44 comprises a multiplexor 46 and a data cell 48. Column 3, lines 66-column 4, line 5.

Thus, *Mann* teaches using the push or pop operation to insert or remove items from an ordered list where the information inserted or removed in the ordered list is stored in data cells which are in units stacked one on top of another in a linear fashion. *Rathbun*, on the other hand, teaches:

The problem presented and solved in the preferred embodiment is the *parallelizing of the list maintenance described above*. The essential functioning of the list remains the same in the parallel version of the data-structure. The Insert(x) and Remove(x) operations produce the same results. *However, on a single-processor system these operations are performed by one processor which can only Insert or Remove one element at a time; on a multi-processor system with P processors, the parallel version of the method can Insert and/or Remove P elements at a time as described below.*

Assuming a multi-processor system with 3 processors ($P=3$), and also assuming a list containing the elements {4,13,14,20,28,34,39,43,53,67,76,81} we have the following parallelized result: each processor keeps approximately one-third of the elements at any given time; each processor may Insert(x) into its own sub-list at any given time (possibly sending the element x to one of the other processors for Insertion into one of the other sub-lists); each processor may Remove(x) from its sub-list at any time and may request that other processors attempt to locate element x in their sub-lists if x is not present in the original processor's sub-list; any other processor finding x in its sub-list then sends x to the original processor. Column 2, lines 23-47.

Thus, *Rathbun* teaches inserting and removing data in an ordered list in a parallel fashion. *Rathbun* teaches that the insert and remove operations may be executed in parallel since the order list is comprised of sublists. By combining *Mann* with *Rathbun*, the push and pop, i.e., the insert and remove operation, would be executed in parallel. However, since the data is stored in the ordered list in a linear fashion, the push and pop operation would be inserting and removing the inappropriate data in the ordered list. This is, because the ordered list in *Mann* does not comprise sublists, *Mann* cannot execute the push or the push operations in parallel as required by *Rathbun*. Thus, by combining *Mann* with *Rathbun*, the principle of operation in *Mann* would change and subsequently render the operation of *Mann* to

perform its purpose unsatisfactory. Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 1-2, 9-10, 12-14 and 16.

B. Mann and Rathbun, taken singly or in combination, do not teach or suggest the following limitations

Mann and Rathbun, taken singly or in combination, do not teach or suggest "*whenever a new activity begins, inserting the new activity at a top of the list*" as recited in claim 1 and similarly in claims 9 and 13. *Mann and Rathbun*, taken singly or in combination, do not teach or suggest "*whenever an activity in the ordered list completes, removing the completed activity from the ordered list*" as recited in claim 1 and similarly in claims 9 and 13. The Examiner states:

Mann fails to explicitly teach inserting and removing whenever an activity begins and is finished, respectfully. However, it is common knowledge in the art that new items/activities to the data structure should be added or inserted to the ordered list. And likewise, it is common knowledge in the art that items/activities that are completed should be removed from the ordered list. The motivation for doing this would be for improving the control of data. If there are activities, they should be in the ordered list so that there could be fast, efficient maintenance of the ordered list of data. Paper No. 3, page 4.

Applicants respectfully traverse the implied assertion that whenever a new activity begins, the new activity is inserted at the top of the list or whenever an activity in the ordered list completes that the completed activity is removed from the ordered list is well known in the art. Applicants respectfully assert that the Examiner must provide a reference that supports the assertion that whenever a new activity begins, it is well known in the art to insert the new activity at the top of a list pursuant to M.P.E.P. § 2144.03. Further, Applicants respectfully assert that the Examiner must provide a reference that supports the assertion that whenever an activity in the ordered list completes, it is well known in the art to remove the completed activity from the ordered list pursuant to M.P.E.P. § 2141.03. Further, as stated above, the Examiner's motivation for modifying *Mann* to insert a new activity at the top of a list when a new activity begins and for modifying *Mann* to remove a complete activity from the ordered list when the activity in the ordered list completes is for improving the

control of data. However, this motivation does not come from either the nature of the problem to be solved, the teaching in the prior art, or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Instead, the Examiner is relying on his own subjective opinion in support of modifying *Mann* to insert a new activity at a top of a list when a new activity begins and for modifying *Mann* to remove a completed activity from the ordered list when the activity in the ordered list completes. The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Mann* to insert a new activity at a top of a list when a new activity begins. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Mann* to remove a complete activity from the ordered list when the activity in the ordered list completes. *Id.*

Further, Applicants respectfully assert that the Examiner's use of Official Notice is inappropriate. The Examiner is only to use Official Notice for facts asserted to be well known or to be common knowledge in the art that are capable of instant and unquestionable demonstration as being well known. *In re Ahlert*, 424 Fd.2d 1088, 1091, 165 U.S.P.Q. 418, 420 (C.C.P.A. 1970); M.P.E.P. § 2144.03. In this case, the facts asserted to be well known or to be common knowledge in the art are not capable of instant and unquestionable demonstration as being well-known. Further, it is not appropriate for the Examiner to take Official Notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known. *In re Ahlert*, 424 Fd.2d at 1091, 165 U.S.P.Q. 420-21; *See also In re Grose*, 592 Fd.2d 1161, 1167-68, 201 U.S.P.Q. 57, 63 (C.C.P.A. 1979). Further, it is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as a principle evidence upon which a rejection was based. *In re Zurko*, 258 F.3d 1379, 1385, 59 U.S.P.Q.2d 1693, 1697 (Fed. Cir. 2001). Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 1-2, 9-10, 12-14 and 16.

Mann and *Rathbun*, taken singly or in combination, do not teach or suggest "displaying the activity that is at the top of the list" as recited in claim 1 and similarly in claims 9 and 13. The Examiner states:

Mann also fails to officially teach: displaying the activities that is at the top of the list. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a feature of displaying the activity that was of interest, or in this particular case, the activity at the top of the list for *reasons of improving the usability for the user*. It would be convenient to the user if it had displayed the activity of interest. Paper No. 3, page 4.

The Examiner's motivation for modifying *Mann* to display the activity that is at the top of the list is not from either the nature of the problem to be solved, the teaching of the prior art, or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Instead, the Examiner is simply relying on his own subjective opinion in support of modifying *Mann* to display an activity that is at the top of the list. The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Mann* to display an activity that is at the top of the list. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, if the Examiner is asserting that it is common knowledge to display the activity that is at the top of the list, Applicants respectfully assert that the Examiner must provide a reference that supports the assertion that whenever an activity in the ordered list completes, it is well known in the art to remove the completed activity from the ordered list pursuant to M.P.E.P. § 2141.03. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 1, 9 and 13. M.P.E.P. §2143.

For at least the above reasons, claims 1, 9 and 13 are patentable over *Mann* in view of *Rathbun*. Claims 2, 10, 12, 14 and 16 recite combinations of features including the above combinations, and thus they are patentable for at least the above reasons as well. Claims 2, 10, 12, 14 and 16 recite additional features, which, in combination with the features of the claims upon which they depend, are patentable over *Mann* in view of *Rathbun*.

For example, *Mann* and *Rathbun*, taken singly or in combination, do not teach or suggest "wherein the displaying step *displays a code pertaining to the latest-started activity that has not completed*" as recited in claim 2 and similarly in claims 10 and 14. The Examiner states:

Likewise the rejection stated in claim 1, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of displaying the activity that was of interest, or in this particular case, the activity at the top of the list for the reason of improving the usability for the user. It would be convenient to the user if it had *displayed the activity of interest*. Paper No. 3, page 5.

The Examiner's motivation for modifying *Mann* to *display a code pertaining to the latest-started activity that has not completed* is not from either the nature of the problem to be solved, the teaching of the prior art, or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Instead, the Examiner is simply relying on his own subjective opinion in support of modifying *Mann* to display a code pertaining to the latest-started activity that has not completed. The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Mann* to *display a code pertaining to the latest-started activity that has not completed*. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, if the Examiner is asserting that it is common knowledge to display a code pertaining to the latest-started activity that has not completed, Applicants respectfully assert that the Examiner must provide a reference that supports the assertion that whenever an activity in the ordered list completes, it is well known in the art to remove the completed activity from the ordered list pursuant to M.P.E.P. § 2141.03. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 2, 10 and 14. M.P.E.P. §2143.

Mann and *Rathbun*, taken singly or in combination, do not teach or suggest "circuitry for *determining if an activity that has completed is currently being displayed; and if the activity that has completed is currently being displayed, circuitry for displaying an activity that had previously been displayed*" as recited in claim 12 and similarly in claim 16. The Examiner states:

Likewise to the rejection stated in claim 1, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of displaying the activity that was of interest, or in this particular case, the activity at the top of the list for the reason of improving the usability for the user. *It would be convenient to the user if it had displayed the activity of interest.* It is also *inherent that there are condition statements created and sent by the programmer that make the decisions on whether or not the activity is to be displayed.* Paper No. 3, pages 5-6.

The Examiner's motivation for modifying *Mann* to *determine if an activity that has completed is currently being displayed* and for modifying *Mann* to *display an activity that had previously been displayed if the activity that has completed is currently being displayed* is not from either the nature of the problem to be solved, the teaching of the prior art, or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Instead, the Examiner is simply relying on his own subjective opinion in support of modifying *Mann* to determine if an activity that has completed is currently being displayed and for modifying *Mann* to display an activity that had previously been displayed if the activity that has completed is currently being displayed. The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Mann* to determine if an activity that has completed is currently being displayed and for modifying *Mann* to display an activity that had previously been displayed if the activity that has completed is currently being displayed. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 12 and 16. M.P.E.P. §2143.

Further, Applicants respectfully traverse the assertion that it is inherent that *Mann* teaches *circuitry for determining if an activity that has completed is currently being displayed*; and *if the activity that has been completed is currently being displayed, circuitry for displaying an activity that had previously been displayed*. In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). That is, in

order for the Examiner to establish inherency, the Examiner **must provide extrinsic evidence that must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.** *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). Inherency, however, may not be established by probabilities or possibilities. *Id.* The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *Id.* Therefore, the Examiner **must support the inherency argument with objective evidence meeting the above requirements.** However, the Examiner has not supported his assertion that it is inherent in *Mann* that *Mann* teaches that above-cited claim limitations. Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 12 and 16. M.P.E.P. §2143.

C. The Examiner has not provided any motivation for combining Mann and Rathbun with Dinwiddie

As stated above, a *prima facie* showing of obviousness requires the Examiner to establish, *inter alia*, that the prior art references teach or suggest, either alone or in combination, all of the limitations of the claimed invention, and the Examiner must provide a motivation or suggestion to combine or modify the prior art reference to make the claimed inventions. M.P.E.P. §2142. The motivation or suggestion to combine references must come from one of three possible sources: the nature of the problem to be solved, the teaching of the prior art and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d. 1453,1458 (Fed. Cir. 1998). The showings must be clear and particular. *In re Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433-34 (Fed. Cir. 2002); *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000); *In re Dembiczak*, 50 U.S.P.Q.2d. 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence. *Id.*

In order to reject under 35 U.S.C. § 103, therefore, the Examiner must provide a proper motivation for modifying the reference. *In re Rouffet*, 47 U.S.P.Q. 2d 1453, 1457-1458 (Fed. Cir. 1998); M.P.E.P. § 2142. The Examiner's motivation for

modifying *Mann* to have a method for tracking activities where the activities are configurations of devices attached to the data processing system is to "increase the functionality of system by communicating with and utilizing other devices." Paper No. 3, page 6. This is merely the Examiner's subjective opinion.

Thus, there is no proper motivation to combine *Mann* and *Rathbun* with *Dinwiddie* as there is no suggestion or motivation in either *Mann*, *Rathbun* or *Dinwiddie*, or in their combination, or in the knowledge of those ordinarily skilled in the art to combine the teaching of storing and modifying the ordered list suitable for use in data communications and other equipment, as taught in *Mann*, with the teaching of creating parallel data structures and associated maintenance programs, as taught in *Rathbun*, with the teaching of merging two virtual operating systems into one physical system, as taught in *Dinwiddie*. As stated above, *Mann* teaches maintaining an ordered list which can store any type and number of data items. Further, *Mann* teaches using the push or pop operation to insert and remove information in an ordered list where the ordered list comprises a plurality of index units, which includes cells to store items of data, stacked one on top of another in a linear fashion. As stated above, *Rathbun* teaches using the insert and remove operation to insert or remove data in an ordered list in a parallel fashion by having the ordered list include sublists. *Dinwiddie* teaches:

The functions of two virtual operating systems (e.g., S/370 VM, VSE or IX370 and S/88 OS) are merged into one physical system. Partner pairs of S/88 processors run the S/88 OS and handle the fault tolerant and single system image aspects of the system. One or more partner pairs of S/370 processors are coupled to corresponding S/88 processors directly and through the S/88 bus. Each S/370 processor is allocated from 1 to 16 megabytes of contiguous storage from the S/88 main storage. Each S/370 virtual operating system thinks its memory allocation starts at address 0, and it manages its memory through normal S/370 dynamic memory allocation and paging techniques. The S/370 is limit checked to prevent the S/370 from accessing S/88 memory space. The S/88 Operating System is the master over all system hardware and I/O devices. The S/88 processors access the S/370 address space in direct response to a S/88 application program so that the S/88 may move I/O data into the S/370 I/O buffers and process the S/370 I/O operations. The S/88 and S/370 peer processor pairs execute their respective Operating Systems in a single system

environment without significant rewriting of either operating system. Neither operating system is aware of the other operating system nor the other processor pairs. Abstract.

Thus, *Dinwiddie* teaches two virtual operating systems executing a single system environment without significant rewriting of either virtual operating system.

The Examiner has not shown why one skilled in the art would combine the teaching of maintaining an ordered list that includes units stacked one on top of another in a linear fashion with the teaching of maintaining an ordered list comprised of sublists using parallel processing with the teaching of merging two virtual operating systems in a single system environment without significant rewriting of either virtual operating system from either the nature of the problem to be solved, the teaching in the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of combining *Mann*, which teaches maintaining an ordered list comprising a plurality of units stacked one on top of another in a linear fashion, with *Rathbun*, which teaches maintaining an ordered list comprised of sublists using parallel processing, with *Dinwiddie*, which teaches merging two virtual operating systems in a single system environment without significant rewriting of either virtual operating system. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002).

As stated above, the Examiner's motivation for modifying *Mann* to include a method for tracking activities where the activities are configurations of devices attached to the data processing system is to increase the functionality of a system by communicating with and utilizing other devices. The Examiner has not shown why *Mann* should be modified to have a method for tracking activities where the activities are configurations of devices attached to the data processing system from either the nature of the problem to be solved, the teaching in the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Further, the Examiner has not shown why *Mann* should be modified to increase the functionality of the system by communicating with and utilizing other devices from either the nature of the problem to be solved, the teaching in the prior

art, or the knowledge of persons of ordinary skill in the art. *Id.* Further, the Examiner must submit **objective evidence** and not rely on his own subjective opinion in support of modifying *Mann* to include a method of tracking activities where the activities are configurations of devices attached to the data processing system. *In re Lee*, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Further, the Examiner must submit **objective evidence** not relying on his own subjective opinion in support of modifying *Mann* to increase the functionality of the system by communicating with and utilizing other devices. *Id.* Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 3, 11 and 15.

D. *Mann, Rathbun and Dinwiddie, taken singly or in combination, do not teach or suggest the following claim limitations*

Mann, Rathbun and Dinwiddie, taken singly or in combination, do not teach or suggest, "wherein the *activities are configurations of devices attached to the data processing system*" as recited in claim 3 and similarly in claims 11 and 15. The Examiner directs Applicants' attention to column 84, line 55 of *Dinwiddie* as teaching the above-cited claim limitation. Paper No. 3, page 6. Instead, *Dinwiddie* teaches I/O devices that are configured. However, *Dinwiddie* does not teach that the configured devices are *activities that are tracked*. Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 3, 11 and 15. M.P.E.P. § 2143.

E. *Conclusion regarding 35 U.S.C. § 103 rejections*

As a result of the foregoing, Applicants respectfully assert that there are numerous claim limitations not taught or suggested in the cited prior art, and thus the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 1-3 and 9-16 in view of the cited prior art.

It is noted that limitations are italicized only for emphasis. Limitations that are italicized are not meant to imply that only those limitations are not taught or suggested in the cited prior art.

III. CONCLUSION

As a result of the foregoing, it is asserted by Applicants that claims 1-3 and 9-16 in the Application are in condition for allowance, and Applicants respectfully request an allowance of such claims. Applicants respectfully request that the Examiner call Applicants' attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining issues.

Respectfully submitted,

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